LOS ANGELES

SOUTH — NORTH

LEGEND

AIRPORTS

Blue indicates Special-use airports (NAME) (118.3*) (ctaf/unicom frequency) Traffic Areas (see FAR 93) (03 / 97 / 220) (135.3) (UNICOM) Airport of entry

FSS - Flight Service Station
CT - Control Tower (CT) - primary frequency
ATIS - Automatic Terminal Information Service
UNICOM - Aeronautical advisory station
VFR Advisory - VFR Advisory Service shown where ATIS not available
Rotating beacon (not all operate sunset to sunrise)
Lighted obstruction
Lighted airport

AIRPORT DATA

Blue indicates Special-use airports
Traffic Area (see FAR 93)
Toll-free Flight Service Station phone number
Control Tower frequency
Segmented Circle
Airport of entry
Rotating beacon (not all operate sunset to sunrise)
Lighted airport

ADDITIONAL AIRPORT INFORMATION

Private (Pvt) - Not available for use without permission of owner or authorized individual.
Military - Other than hard-surfaced, 40 military airports are identified by abbreviations: AFB, NAS, AAF, or complete airport name, such as COLD LAKE.

Elevation in feet
L - Lighting in operation Sunset to Sunset
*L - Lighting available on request, part-time lighting, or pilot-controlled lighting
Length of longest runway in hundreds of feet. Usable length may be less.

When facility or information is lacking, the respective character is replaced by a dash. All lighting codes, other than pilot-controlled lighting, may not be the longest or lightest full length.
All runways are lighted.
NOTE - Non-Federal Control Tower

Rotating beacon not in operation Sunset to Sunrise

RADIO AIDS TO NAVIGATION AND COMMUNICATION BOXES

122.18 122.6 122.8

VHF OMNI RANGE (VOR)
VORTAC
VOR DME

OAKDALE 382 118.6 OAK

Underline indicates no voice on this freq
Dashes indicates TWEB, AWOS or HIWAS available at this NAVAID
W - weather only
T - transmit only

CHICAGO CHI

Name of associated Flight Service Station (FSS). Freqs 121.5, 122.2, 243.0 and 255.4 are normally available at all FSSs and are not shown above boxes; all other freqs are shown.

For Airport Advisory Service use FSS freq 123.6.

In Canada all available FSS frequencies are shown.

122.18 — MIAMI Controlling FSS

Frequencies above thin line box are remoted to NAVAID site. Other freqs of controlling FSS may be available determined by altitude and terrain. Consult Airport/Facility Directory for complete information.

Non-Directional Radiobeacon

HH POINT LOMA 302 — — 38 11-99 & 1-100

Other facilities: • Commercial Broadcast Stations, FSS Outlets, RCO, etc.

AIRPORT TRAFFIC SERVICE AND AIRSPACE INFORMATION

AIRSPACE INFORMATION

Only the controlled and reserved airspace extending upward from 18,000 ft MSL are shown on this chart. All lines are solid.

180° — V 3

Low Altitude Federal Airways are indicated by centerline.

A - Transition Area
The basis of classified airspace are shown by tint boards (hachures) and are color-coded in blue and magenta.

Floor 700 feet above surface

Floor 1200 feet above surface

Floors other than 700 feet or 1200 feet above surface.

2000 / 2000 MSL

Prohibited, Restricted, Warning and Alert Area (R2518 - Military Activity, Scoring Route)

Control Zone

Extends upward from the surface

Extends upward from 700 feet above the surface

Extends upward from 1200 feet above the surface

Positive Control Area
See Airport Facility Directory
Intersection - Arrows are directed towards facilities which establish intersection.

NAME (Red, Blue or Black)
Name of Fix

Special Airport Traffic Areas

Special Air Traffic Rules (see FAR Part 93 for details)

TCA Terminal Control Area
Class B (see FAR 91.24 (ARC)
ARSA Airport Radar Service Area
TRSA Terminal Radar Service Area
National Security Area
MOA Military Operations Area
Scoring Route

TOPOGRAPHICAL INFORMATION

Roads
Road Markers
Railroad
Bridges And Viaducts
Power Transmission Lines
Cableway, Height greater than 200 ft
Aerial Cable
Landing Strips (Hard Surface) (Turf) (Sod) (Sand) (Dirt) (Water) (Snow) (Ice) (Under Construction) (Abandoned) (Closed) (Heliport) (Glider) (Ultralight) (Balloon)
Tank, water, oil or gas
Oil Well • Water Well
Mines And Quarries
11823 Elevation of Point
Outdoor Theater
Rock
Perennial Lake
Non-Perennial Lake
Dams

OBSTRUCTIONS
1000 ft and higher AGS
Below 1000 ft AGS
Group Obstruction
Obstruction with its extremity lights. Wires operate part time
2049 — Elevation of the top above mean sea level
1149 — Height above ground
Under construction and not yet published
Obstruction marked/lighted
CAUTION: Give wires may extend outward from structure

MISCELLANEOUS

Glider Operations
Ultralight Activity
Parachute Jumping Area
Marine Light

MILITARY TRAINING ROUTES (MTR)

All IR and VR MTRs are shown and may extend from the surface upwards. Only the route centerline, direction of flight along the route and the route designator are depicted - route widths and altitudes are not shown.

Since these routes are subject to change every 56 days, and the charts are revised every 6 months, pilots are cautioned and advised to contact the nearest FSS for route dimensions and current status for those routes affecting your flight.

Routes with a change in the alignment of the charted route centerline will be indicated in the Aeronautical Chart Bulletin of the Airport/Facility Directory. Also, the VFR Wall Planning Chart is issued every 56 days and displays current route configurations and a complete tabulation of altitudes along these routes.

Military Pilots refer to Area Planning AP/1B Military Training Route North and South America for current routes.

LOS ANGELES
SECTIONAL AERONAUTICAL CHART
SCALE 1:500,000

L 89/989-2

45TH EDITION - July 27, 1989

Includes airspace amendments effective July 27, 1989 and all other aeronautical data received by June 1, 1989
Consult appropriate NOTAMs and Flight Information Publications for supplemental data and current information.

This chart will become OBSOLETE FOR USE IN NAVIGATION upon publication of the next edition scheduled for JANUARY 11, 1990

PUBLISHED IN ACCORDANCE WITH INTERAGENCY AIR CARTOGRAPHIC COMMITTEE AGREEMENTS ESTABLISHED BY DEPARTMENT OF DEFENSE • FEDERAL AVIATION ADMINISTRATION • DEPARTMENT OF COMMERCE

CONTOUR INTERVAL 500 feet
Intermediate contour 250 feet
Auxiliary contours 100 foot intervals

HIGHEST TERRAIN elevation is 11,499 feet located at 34° 06' N. - 116° 49' W.
Critical elevation • 4254
Approximate elevation • 5200
Doubtful locations are indicated by omission of the point locator (dot or "x")

11499 — 10000 — 7500 — 5000 — 3000 — 2000 — 1000 — Sea Level — 235

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U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service

C55.416/10:

CONTROL TOWER FREQUENCIES ON LOS ANGELES SECTIONAL CHART

Airports which have control towers are indicated on the chart by the letters CT followed by the primary VHF local control frequency. Selected transmitting frequencies for many control towers are tabulated in the adjoining space, the low or medium frequency is listed first followed by a VHF local control frequency, and the primary VHF and UHF military frequencies, when these frequencies are available. An asterisk (*) follows the part-time tower frequency denoted to the collocated full-time. FSS for non-Airport Advisory Service (AAS) during hours tower is closed. Hours shown are local time. Radio call preceded if different from tower name.

Automatic Terminal Information Service (ATIS) frequencies, shown on the face of the chart are normal arriving frequencies, all ATIS frequencies available are tabulated below.

ASR and/or PAR indicates Radar Instrument Approach available.

CONTROL TOWER	RADIO CALL	OPERATES	ATIS	FREQ	ASR/PAR
BRACKETT		0700-2100	124.4	118.2	
BROWN		0800-2000	133.35	126.1 128.25 288.1	
BURBANK GLENDALE PASADENA	BURBANK	CONTINUOUS	134.3	118.7 254.3	
MCAS CAMP PENDLETON	CAMP PENDLETON	0700-1700 MON & FRI 0700-2100 TUE THRU 0700 MOS	269.6	126.5 380.2	ASR/PAR
CHINA LAKE NWC	CHINA LAKE	0630-2230	265.3	126.5 340.2	
CHINO	CHINO	0700-2100	121.15	118.3	
EDWARDS AFB	EL CENTRO	0700-2300 MON-SAT CSD MOS	377.4	119.1 340.2	
NAF EL CENTRO		0700-2300 MON-SAT CSD MOS	118.25	121.2	
EL MONTE		0700-2200 MON THRU 0700-1800 SAT & SUN CSD MOS	117.2 284.2	133.1 360.2	ASR/PAR
MCAS EL TORO	EL TORO	0700-2200 MON THRU 0700-1800 SAT & SUN CSD MOS	127.05	118.1	
FULLERTON	FOX	0700-2100		380.3* 256.9	
GENERAL FOX					
GEN RODRIGUEZ INTL	MEXICALI	0600-2000		118.1	
GEN TABOADA INTL		0600-1800	273.5	118.35 348.4	ASR/PAR
GEORGE AFB		CONTINUOUS	135.45	126.7 133.8	
GILLESPIE		0700-2100		257.8	
GLENDALE		0630-2000		121.1 257.8	
GUATHOMING		0700-2300 MON-FRI	276.2	120.65 371.4	ASR/PAR
GUAYMAS INTL	IMPERIAL BEACH	CSD MOS			
GUAYMAS INTL	ORANGE COUNTY	0600-0345	136.0	119.9 126.8	
HAWTHORNE		0615-0345	127.75	379.9 119.4 120.5	
HAWTHORNE		CONTINUOUS		257.6	
HAWTHORNE		0800-1600 SAT-MON 0700-2200 TUE-FRI		123.85 347.5	ASR/PAR
HAWTHORNE		CONTINUOUS	AIR 133.8 DEP 135.65	120.95 135.9 379.1	
HAWTHORNE		CONTINUOUS	270.1	127.65 353.5	ASR/PAR
HAWTHORNE		0700-2300	AIR 123.6 DEP 116.9	118.4	
HEMET		0800-2000	130.15	118.6 392.2	
HUGHES		0700-1700 MON-FRI	118.6	118.1 257.8	
HUNTINGTON BEACH	BASEFIELD	0600-2300	124.2 315.6	269.4	ASR/PAR
HUNTINGTON BEACH	HUNTINGTON	0800-2400 MON-FRI 0800-1800 SAT & SUN	280.4	127.6	
IMPERIAL		0700-1700 MON-FRI		119.2 123.7	
IMPERIAL		0700-2100	126.8	269.4	
INDIO		CONTINUOUS	283.0	135.1 336.4	ASR/PAR
INGLEWOOD		0700-2130		119.45 350.1	
IRVINE		CONTINUOUS	134.35	120.6 385.6	
IRVINE		CONTINUOUS	128.55	120.0 257.8	ASR
JULIAN		0700-2100	118.05	123.7 317.6	
KEARNEY MESA NAF	PALOMAR	0700-2000 MON-FRI 1000-1800 SAT		269.0	
KEARNEY MESA NAF		0700-2300	118.25	119.7 257.8	
LAKE ELSINORE		0700-2300	125.55 277.2	124.85 342.8	ASR/PAR
LAKE ELSINORE MISSIONAL					
LAKE POINT MUGU	POINT MUGU	0600-2200 CSD MOS		135.0	

CAUTION: This chart is primarily designed for VFR navigational purposes and does not purport to indicate the presence of all helpline, transmission line, or overhead wire hazards. Terrain or obstacles which may be encountered below reasonable altitudes.

TCA, ARSA, TRSA, AND SELECTED RADAR APPROACH CONTROL FREQUENCIES

RIVERSIDE		0700-2000	128.8	121.0 257.8	
RIVERSIDE MUNI	SAN CLEMENTE I	0800-1800 MON-THU 0800-1600 FRI	268.6	126.75 340.2	ASR/PAR
SAN DIEGO INTL LINDBERGH	SAN CLEMENTE ISLAND	CSD MOS			
SAN LUIS OBISPO CO	LINDBERGH	CONTINUOUS	134.8	118.2 270.9	
SAN NICOLAS I	SAN LUIS	0700-2000	118.8	126.7 379.9	
SANTA BARBARA	NAVY NICOLAS	0800-1600 MON-FRI		126.85 274.8	ASR/PAR
SANTA MARIA		CSD MOS	124.8	119.7 262.4	
SANTA MONICA		0600-2000	121.15	118.3 289.6	
TORRANCE		0700-2100	119.15	120.1 257.8	
		0700-2000	125.6	118.9 134.0 257.8	
MCAS TUSTIN	TUSTIN	1100-2100 MON 0800-2000 TUE-THU 0800-1700 FRI	384.3	126.2 335.1	ASR/PAR
TWENTYNINE PALMS EAF		0800-1600 MON-FRI CSD MOS		126.2 340.2	
VANDENBERG AFB		0800-1700 MON-FRI CSD MOS	125.7 271.8	124.95 336.3	ASR
VAN NUYS		0700-2300	118.45	119.2 120.2 256.2	
WHITEMAN		0800-2000		135.0	

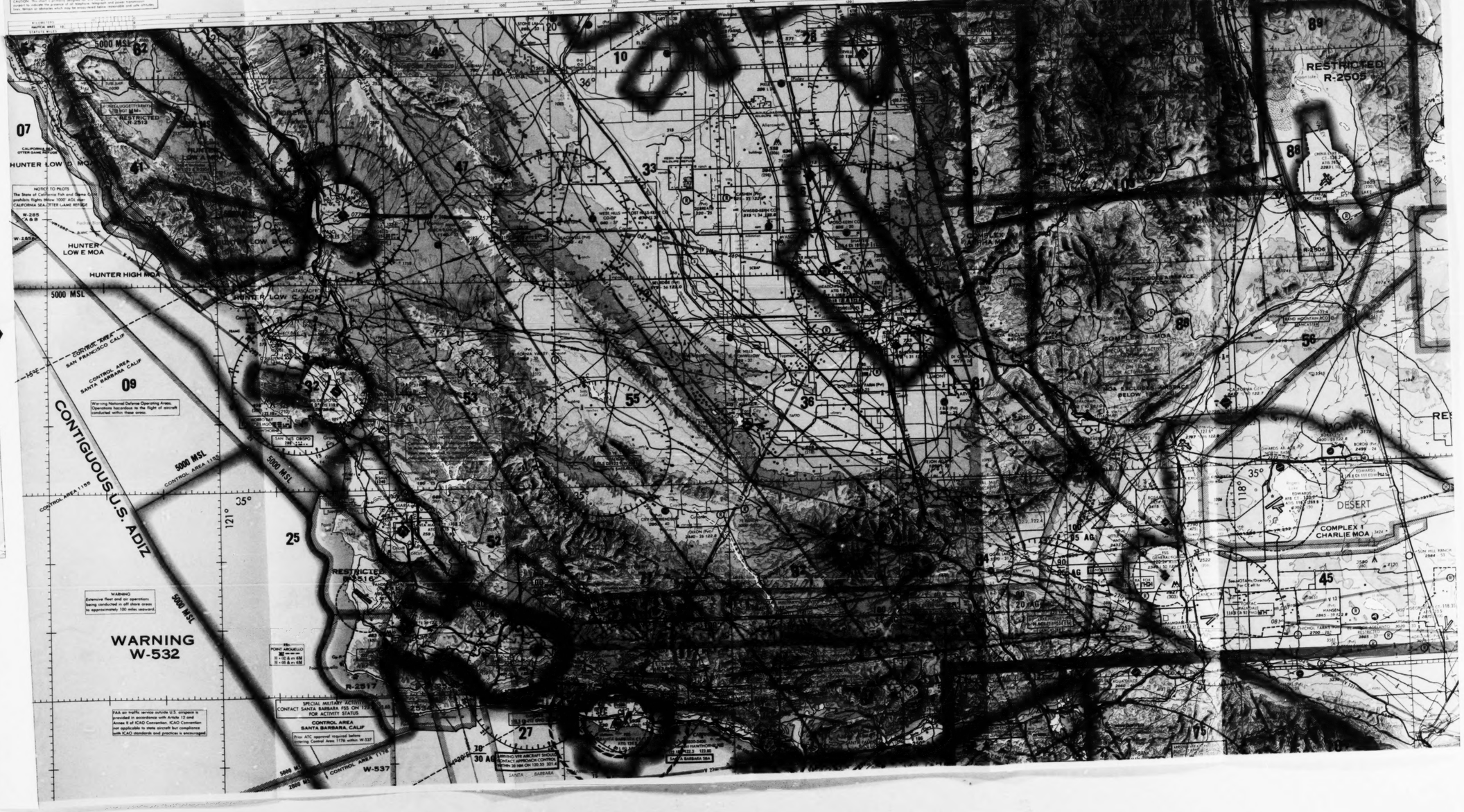
SPECIAL USE AIRSPACE ON LOS ANGELES SECTIONAL CHART

Unless otherwise noted altitudes are MSL and in feet. Time is local. Contact nearest FSS for information. TONe- time % NOTAM content FSS

The word "TO" on altitude means "To and including."
H - High Level
NO A/G - No air to ground communication

U.S. P-PROHIBITED, R-RESTRICTED, A-ALERT, W-WARNING, MOA-MILITARY OPERATIONS AREA

NUMBER	LOCATION	ALTITUDE	TIME OF USE	CONTROLLING AGENCY
R2501 E	BULLION MOUNTAINS EAST, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
R2501 N	BULLION MOUNTAINS NORTH, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
R2501 S	BULLION MOUNTAINS SOUTH, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
R2501 W	BULLION MOUNTAINS WEST, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
R2501 E	FORT IRWIN, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
R2501 N	FORT IRWIN, CA	10,000 MSL	0600-2400	ZLA CNTR
R2503	CAMP PENDLETON, CA	TO 13,000	OT BY NOTAM - HOURS IN ADVANCE	
R2504	CAMP ROBERTS, CA	TO 13,000	0600-2400	ZOA CNTR
R2505	CHINA LAKE, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
R2506 E	CHINA LAKE SOUTH, CA	TO 6000	08-05 MON-FRI	ZLA CNTR
R2507 N	NORTH CHOCOLATE MOUNTAINS, CA	TO FL 400	CONTINUOUS	ZLA CNTR
R2507 S	SOUTH CHOCOLATE MOUNTAINS, CA	TO FL 400	CONTINUOUS	ZLA CNTR
R2509	SUPERIOR VALLEY, CA	TO FL 500	0600-2300, OT BY NOTAM 24 HOURS IN ADVANCE	ZLA CNTR
R2512	EL CENTRO, CA		0600-2300, OT BY NOTAM 24 HOURS IN ADVANCE	ZLA CNTR
R2513	HOLTVILLE, CA	TO 23,000	0600-2300, OT BY NOTAM 24 HOURS IN ADVANCE	ZLA CNTR
R2515	HUNTER-LIGGETT, CA	TO FL 340	CONTINUOUS	ZLA CNTR
R2515	MUROC LAKE, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
R2516	WESTERN SPACE AND MISSILE CENTER (WSMC) VANDENBERG AFB, CA	UNLIMITED	CONTINUOUS	WSMC
R2517	WESTERN SPACE AND MISSILE CENTER (WSMC) VANDENBERG AFB, CA	UNLIMITED	CONTINUOUS	WSMC
R2518	CASTLE ROCK, CA	TO 3000	INTERMITTENT ACTIVATED BY NOTAM 24 HOURS IN ADVANCE	NO A/G
R2519	POINT MUGU, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
R2524	TRONA, CA	UNLIMITED	CONTINUOUS	COAST TRACON
R2525	SACRAMENTO, CA	TO 3000	CONTINUOUS	ZLA CNTR
R2526 A&B	POINT ARGUELLO, CA	500 AGL TO UNLIMITED	CONTINUOUS	ZLA CNTR
R2527	POINT MUGU, CA	UNLIMITED	INTERMITTENT	ZLA CNTR
R2531	POINT MUGU, CA	UNLIMITED	INTERMITTENT	ZLA CNTR
R2532	POINT MUGU, CA	TO FL 600	0700-2100 MON-FRI	ZLA CNTR
R2533	SAN FRANCISCO, CA	10,000 MSL TO SURFACE TO 14,000 BELOW 14,000 IN 25S B	0500-2100 MON-FRI	ZOA CNTR
R2535 A	SAN FRANCISCO, CA	14,000 TO FL 450	0500-2100 MON-FRI	ZOA CNTR
R2535 B	POINT MUGU, CA	5000 MSL TO FL 340	INTERMITTENT	ZLA CNTR
R2535 N	POINT MUGU, CA	TO FL 340	INTERMITTENT	ZLA CNTR
R2535 S	POINT MUGU, CA	TO FL 800	INTERMITTENT	ZLA CNTR
R2537	SAN DIEGO, CA	TO FL 800	CONTINUOUS	ZLA CNTR
R2538	SANTA CRUZ ISLAND, CA	TO 3000	CONTINUOUS DATE	ZLA CNTR
R2539	NAVAL WEAPONS FACILITY	UNLIMITED	INTERMITTENT	ZLA CNTR
R2540	POINT ARGUELLO, CA	UNLIMITED	INTERMITTENT	ZLA CNTR
R2547	SANTA BARBARA, CA			


LOS ANGELES
HUNTER LOW G MOA
HUNTER LOW E MOA
HUNTER HIGH MOA
5000 MSL
NOTICE TO PILOTS
The State of California Fish and Game Code prohibits flights below 1000' AGL over CALIFORNIA SEA-BIRD GAME REFUGE
W-285
W-289
CONTROL AREA SAN FRANCISCO CALIF
CONTROL AREA SANTA BARBARA CALIF
09
Warning National Defense Operating Areas. Operations hazardous to the flight of aircraft conducted within these areas.
CONTIGUOUS U.S. ADIZ
CONTROL AREA 1150
5000 MSL
WARNING
W-532
Extensive fleet and air operations being conducted in off shore areas to approximately 100 miles seaward.
FAA air traffic service outside U.S. airspace is provided in accordance with Article 12 and Annex 9 of ICAO Convention. ICAO Convention not applicable to state aircraft but compliance with ICAO standards and practices is encouraged.
SPECIAL MILITARY ACTIVITY
CONTACT SANTA BARBARA FSS ON 122.2 FOR ACTIVITY STATUS
CONTROL AREA
SANTA BARBARA CALIF
Prior ATC approval required before entering Control Area 1178 within W-537
CONTROL AREA 1178
W-537
RESTRICTED R-2513
R-2517
R-2515
R-2519
R-2535
R-2536
R-2524
R-2505
R-2508
RESTRICTED R-2505
COMPLEX 1
CHARLIE MOA
DESERT
EDWARDS AFB
CHINA LAKE NAVAL WEAPONS CENTER
POINT MUGU
SAN NICOLAS I
SAN CLEMENTE I
SAN DIEGO
SAN LUIS OBISPO
SANTA BARBARA
SANTA MARIA
SANTA MONICA
TORRANCE
RIVERSIDE
HAWTHORNE
IMPERIAL BEACH
ORANGE COUNTY
LONG BEACH
FULLERTON
CHINO
BURBANK
PASADENA
EL MONTE
GEORGE AFB
VANDENBERG AFB
LAKE ELSINORE
HEMET
IRVINE
JULIAN
IMPERIAL
INDIO
HUGHES
TWENTYNINE PALMS EAF
NAF EL CENTRO
BRACKETT
BROWN
GEN TABOADA INTL
GEN RODRIGUEZ INTL
GUATHOMING
GUAYMAS INTL
LAKE POINT MUGU
LAKE ELSINORE MISSIONAL
KEARNEY MESA NAF
LAKE ELSINORE NAF
GILLESPIE
HUNTINGTON BEACH
IRVINE
INGLEWOOD
HAWTHORNE
CHINA LAKE NWC
MCAS CAMP PENDLETON
MCAS EL TORO
MCAS TUSTIN
GENERAL FOX
GLENDALE
BURBANK GLENDALE PASADENA
EDWARDS AFB
NAF EL CENTRO
CHINA LAKE NAVAL WEAPONS CENTER
MCAS CAMP PENDLETON
MCAS EL TORO
MCAS TUSTIN
NAVAL WEAPONS FACILITY
POINT ARGUELLO
SANTA BARBARA
SANTA CRUZ ISLAND
POINT MUGU
SAN DIEGO
SAN LUIS OBISPO
SAN FRANCISCO
SACRAMENTO
TRONA
POINT MUGU
FORT IRWIN
CAMP ROBERTS
CHINA LAKE
CHINA LAKE SOUTH
NORTH CHOCOLATE MOUNTAINS
SOUTH CHOCOLATE MOUNTAINS
SUPERIOR VALLEY
EL CENTRO
HOLTVILLE
HUNTER-LIGGETT
MUROC LAKE
WESTERN SPACE AND MISSILE CENTER (WSMC) VANDENBERG AFB
CASTLE ROCK
BULLION MOUNTAINS EAST
BULLION MOUNTAINS NORTH
BULLION MOUNTAINS SOUTH
BULLION MOUNTAINS WEST
FORT IRWIN
CAMP PENDLETON
CHINA LAKE
CHINA LAKE SOUTH
NORTH CHOCOLATE MOUNTAINS
SOUTH CHOCOLATE MOUNTAINS
SUPERIOR VALLEY
EL CENTRO
HOLTVILLE
HUNTER-LIGGETT
MUROC LAKE
WESTERN SPACE AND MISSILE CENTER (WSMC) VANDENBERG AFB
CASTLE ROCK
SACRAMENTO
TRONA
POINT MUGU
SAN DIEGO
SAN LUIS OBISPO
SAN FRANCISCO
POINT ARGUELLO
SANTA BARBARA
SANTA CRUZ ISLAND
NAVAL WEAPONS FACILITY
CAMP ROBERTS

TCA ARSA, TRSA AND SELECTED RADAR APPROACH CONTROL FREQUENCIES

LAS VEGAS TCA	119.4 335.3 (360°-090°) 133.95 295.7 (090°-360°) 134.2 287.8 (090°-360° INTERSTATE 15, SOUTH OF 280°) 118.4 287.8 (EAST OF INTERSTATE 15, SOUTH OF 280°)
LAS VEGAS TCA	124.95 279.7 (NORTH)
LAS VEGAS TCA	134.9 360.0
LAS VEGAS TCA	119.8 306.7 (A) 125.3 390.4 (F) (NOT 310°-333°) 134.15 187.5 (B) 132.2 269.1 (H) 125.15 285.2 (C) 128.1 360.5 (D)
LOS ANGELES AREA	120.4 360.0 (NW 281° BUR 090°) 134.2 338.2 (NW 281° BUR 090°) 135.05 317.5 (BUR 090°-NE 180°) 134.1 312.7 (BUR 180°-NE 360°)
LOS ANGELES AREA	124.85 343.9 (SOUTHWEST-WEST) 127.0 380.2 (SOUTHEAST-SOUTHWEST BELOW 4000') 124.1 323.1 (EAST-SOUTHEAST ABOVE 4000')
SANTA BARBARA MUNICIPAL AIRPORT	127.25 318.0 (NORTH-NORTHEAST) 119.65 327.3 (NORTHEAST-EAST) 134.2 278.3 (EAST-SOUTH) 135.4 295.7 (SOUTHWEST) 133.8 295.7 (WEST-NORTHWEST-NORTH)
SANTA BARBARA AREA	125.4 347.1 (WEST) 134.4 377.9 (350°-150°)
PALM SPRINGS TRSA	128.7 (WEST-NORTH) 257.8
MCAS CAMP PENDLETON	132.2 323.0
OCEANSIDE AIR RADAR	133.65 348.7
OCEANSIDE AIR RADAR	135.15 269.2
SAN CLEMENTE ISLAND RADAR	125.15 285.2
SAN POINT MUGU RADAR	128.65 325.0
LOS ANGELES/LONG BEACH AIRPORT	118.0 339.1

SPECIAL USE AIRSPACE ON LOS ANGELES SECTIONAL CHART

Unless otherwise noted altitudes are MSL and in feet, time is local.
Contact nearest FSS for information.
*Other time by NOTAM; contact FSS.

The word "TO" on altitude means "To and including."
(1) Flight Level
NO A/G - Not an air to ground communications facility.

U.S. P-PROHIBITED, R-RESTRICTED, A-ALERT, W-WARNING, MOA-MILITARY OPERATIONS AREA

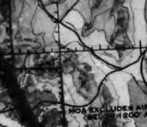
NUMBER	LOCATION	ALTITUDE	TIME OF USE	CONTROLLING AGENCY
2501 E	BULLION MOUNTAINS EAST, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
2501 N	BULLION MOUNTAINS NORTH, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
2501 S	BULLION MOUNTAINS SOUTH, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
2501 W	BULLION MOUNTAINS WEST, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
2502 E	FORT IRWIN, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
2502 N	FORT IRWIN, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
2503	CAMP PENDLETON, CA	TO 15,000	0600-2400 24 HOURS BY NOTAM 24 HOURS IN ADVANCE	ZLA CNTR
2504	CAMP ROBERTS, CA	TO 15,000	0600-2400	ZOA CNTR
2505	CHINA LAKE, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
2506	CHINA LAKE SOUTH, CA	TO 4000	SR-SS MON-FRI	ZLA CNTR
2507 N	NORTH CHOCOLATE MOUNTAINS, CA	TO FL 400	CONTINUOUS	ZLA CNTR
2507 S	SOUTH CHOCOLATE MOUNTAINS, CA	TO FL 400	CONTINUOUS	ZLA CNTR
2509	SUPERIOR VALLEY, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
2510	EL CENTRO, CA	TO FL 300	0600-2200 BY 30 NOTAM 24 HOURS IN ADVANCE	ZLA CNTR
2512	MOLTVILLE, CA	TO 23,000	0600-2200 BY 30 NOTAM 24 HOURS IN ADVANCE	ZLA CNTR
2513	HUNTER-LIGGETT, CA	TO FL 240	CONTINUOUS	ZOA CNTR
2515	MUROC LAKE, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
2516	WESTERN SPACE AND MISSILE CENTER (WSMC) VANDENBURG AFB, CA	UNLIMITED	CONTINUOUS	WSMC
2517	WESTERN SPACE AND MISSILE CENTER (WSMC) VANDENBURG AFB, CA	UNLIMITED	CONTINUOUS	WSMC
2518	CASTLE ROCK, CA	TO 3000	INTERMITTENT ACTIVATED BY NOTAM 24 HOURS IN ADVANCE	NO A/G
2519	POINT MUGU, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
2520	NICHOLS, CA	UNLIMITED	CONTINUOUS	ZLA CNTR
2521	OCEANSIDE, CA	TO 3000	CONTINUOUS	COAST TRACON
2524 A&B	POINT ARGUELLO, CA	500 AGL TO UNLIMITED	CONTINUOUS	ZLA CNTR
46	POINT MUGU, CA	UNLIMITED	INTERMITTENT	ZLA CNTR
47	POINT MUGU, CA	UNLIMITED	INTERMITTENT	ZLA CNTR
181	SAN FRANCISCO, CA	TO FL 600	0500-2100 MON-FRI	ZOA CNTR
183 A	SAN FRANCISCO, CA	TO FL 430 (EXCEPT SURFACE TO 14,000 BELOW W-283 S)	0500-2100 MON-FRI	ZOA CNTR
281 S	SAN FRANCISCO, CA	16,000 TO FL 450	0500-2100 MON-FRI	ZOA CNTR
287	POINT MUGU, CA	UNLIMITED	INTERMITTENT	ZLA CNTR
289 N	POINT MUGU, CA	TO FL 240	INTERMITTENT	ZLA CNTR
291	SAN DIEGO, CA	TO FL 800	INTERMITTENT	ZLA CNTR
293	SAN DIEGO, CA	TO FL 800	INTERMITTENT	ZLA CNTR
417	SANTA CRUZ ISLAND, CA	TO 3000	CONTINUOUS DAYS	ZLA CNTR
507	POINT ARGUELLO, CA	UNLIMITED	INTERMITTENT	ZLA CNTR
517	SANTA BARBARA, CA	UNLIMITED	INTERMITTENT	ZLA CNTR

MOA NAME	ALTITUDE OF USE*	TIME OF USE†	CONTROLLING AGENCY
BAKER	7000	0600-2200 MON-FRI	ZLA CNTR
BAKER	200 AGT TO 7000	0600-2200 MON-FRI	ZLA CNTR
BRISTOL	5000	0700-1800 MON-FRI	ZLA CNTR
COMPLEX 1	200 AGL	0600-2200 MON-FRI SR TO 1200 SAT	ZLA CNTR OR EDWARDS RAPCON
COMPLEX 1 ALPHA	2000 AGL	0600-2200 MON-FRI	ZLA CNTR OR EDWARDS RAPCON
COMPLEX 1 BRAVO & CHARLIE	200 AGL	0600-2200 MON-FRI	ZLA CNTR OR EDWARDS RAPCON
COMPLEX 2	200 AGL	0600-2200 MON-FRI	ZLA CNTR OR EDWARDS RAPCON
COMPLEX 2 ALPHA	2000 AGL	0600-2200 MON-FRI	ZLA CNTR OR EDWARDS RAPCON
COMPLEX 4&5 ALPHA	200 AGL	0600-2200 MON-FRI	ZLA CNTR OR EDWARDS RAPCON
FOOTHILL	2000 AGL	0600-2000 MON-FRI	ZOA CNTR
HUNTER MOA	11,000	INTERMITTENT BY NOTAM	ZOA CNTR
HUNTER LOW A	300 AGL TO BUT NOT INCL 11,000	INTERMITTENT	ZOA CNTR
HUNTER LOW B	3000 AGL TO BUT NOT INCL 11,000	INTERMITTENT	ZOA CNTR
HUNTER LOW C	3900 AGL TO BUT NOT INCL 11,000	INTERMITTENT	ZOA CNTR
HUNTER LOW E	1500 AGL TO 4000	INTERMITTENT	ZOA CNTR
HUNTER LOW E	1500 A' TO 3900	CONTINUOUS DAYS	ZLA CNTR
KANE	10,000	0500-2100	ZOA CNTR
QUAIL	10,000	0600-2100 MON-FRI	ZOA CNTR
ROGERS	300 AGL TO BUT NOT INCL 13,000	INTERMITTENT BY NOTAM	ZOA CNTR
SUNDANCE	500 AGL TO 10,000	BY NOTAM	ZOA CNTR
TURTLE	11,000	0600-2100 MON-FRI	ZOA CNTR

*Altitudes indicate floor of MOA. All MOA's extend to but do not include FL 180 unless otherwise indicated in tabulation or on chart.

SPECIAL MILITARY ACTIVITY

The chart scientific IFR Military Training Routes and Military Operations Areas within which the Department of Defense conducts periodic operations involving unmanned aerospace vehicles. These vehicles are escorted by military tactical type aircraft which, as necessary, exercise override flight control of their unmanned vehicles. Status of these routes and areas may be obtained by contacting the FAA/DOD facility on designated frequencies along the routes and as depicted on this chart. The lateral limits of these specified routes are shown by the Special Use Airspace symbol. Altitudes for these route segments are also shown.



REGULATIONS REGARDING FLIGHTS OVER CHARTED NATIONAL PARK SERVICE AREAS, U.S. FISH AND WILDLIFE SERVICE AREAS, AND U.S. FOREST SERVICE AREAS

The landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service or U.S. Forest Service without authorization from the respective agency. Exceptions include: 1) when forced to land due to an emergency beyond the control of the operator, 2) at officially designated landing sites, or 3) on approved official business of the Federal Government.

All aircraft are requested to maintain a minimum altitude of 2,000 feet above the surface of the following: National Park Service, National Wildlife Refuge, Big Game Refuge, Game Ranges and Wildlife Ranges administered by the U.S. Fish and Wildlife Service; and Wilderness and Primitive areas administered by the U.S. Forest Service FAA Advisory Circular (AC) 91-36C, "Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas," defines the surface as: the highest terrain within 2,000 feet laterally of the route of flight, or the upper-most rim of a canyon or valley.

Federal regulations also prohibit airdrops by parachute or other means of persons, cargo, or objects from aircraft on lands administered by the three agencies without authorization from the respective agency. Exceptions include: 1) emergencies involving the safety of human life, or 2) threat of serious property loss.

Boundary of National Park Service areas, U.S. Fish and Wildlife Service areas and U.S. Forest Service Wilderness and Primitive areas.

ATTENTION

THIS CHART CONTAINS MAXIMUM ELEVATION FIGURES (MEF) in each quadrangle formed by ticked lines for charting and navigation purposes. Figures in quadrangles bounded by ticked lines are rounded up and represent one or THOUSANDS and HUNDREDS of feet above mean sea level. The MEF is based on information available concerning the highest feature contained in each quadrangle, including terrain and obstructions (trees, towers, buildings, etc.).

Example: 12,300 feet 125

Uncontrolled airspace within the United States extends up to 14,500 feet MSL. At and above this altitude all airspace is within the Continental Control Area, excluding the airspace less than 1,500 feet above the terrain and certain special use airspace areas.

NOTICE TO USERS OF THIS CHART

You are urgently requested to inform us of corrections and additions that come to your attention while using this chart. Postage-paid Chart Correction cards are available at authorized chart sales agents and at FAA Flight Service Stations. Where delineation of data is required, such information should be indicated clearly and accurately on a current chart or replacement copy will be returned. Mail to: National Ocean Service, NOAA, N/CG33, 6010 Executive Blvd., Rockville, MD 20852 or call toll-free: 800-626-3677

TERMINAL CONTROL AREA ALTITUDES

90 ---- Ceiling of TCA in hundreds of feet MSL
80 ---- Floor of TCA in hundreds of feet MSL

L 89/989-2

SOUTH

NORTH

LOS ANGELES

SECTIONAL AERONAUTICAL CHART
SCALE 1:500,000

Lambert Conformal Conic Projection Standard Parallels 33°20' and 38°40'

Topographic data corrected to May 1989

45TH EDITION July 27, 1989

Includes airspace amendments effective July 27, 1989

and all other aeronautical data received by June 1, 1989

Consult appropriate NOTAMs and Flight Information Publications for supplemental data and current information.

This chart will become OBSOLETE FOR USE IN NAVIGATION upon publication of the next edition scheduled for JANUARY 11, 1990

PUBLISHED IN ACCORDANCE WITH INTER-AGENCY AIR CARTOGRAPHIC COMMITTEE SPECIFICATIONS AND AGREEMENTS APPROVED BY

DEPARTMENT OF DEFENSE • FEDERAL AVIATION ADMINISTRATION • DEPARTMENT OF COMMERCE

CONTOUR INTERVAL 500 feet

Intermediate contour 250 feet

Auxiliary contours 100 foot intervals

HIGHEST TERRAIN elevation is 11499 feet located at 34°06'N - 116°49'W

Critical elevation ..... • 4254

Approximate elevation ..... x 3200

Doubtful locations are indicated by omission of the point locator (dot or "x")

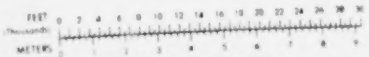
MILITARY TRAINING ROUTES (MTRs)

All IR and VR MTRs are shown, and may extend from the surface upwards. Only the route centerline, direction of flight along the route and the route designator are depicted -- route widths and altitudes are not shown.

Since these routes are subject to change every 56 days, and the charts are reissued every 6 months, you are cautioned and advised to contact the nearest FSS for route dimensions and current status for those routes affecting your flight.

Routes with a change in the alignment of the charted route centerline will be indicated in the Aeronautical Chart Bulletin of the Airport/Facility Directory. Also, the VFR Wall Planning Chart is issued every 56 days and displays current route configurations and a composite tabulation of altitudes along these routes.

Military Pilots refer to Area Planning AP/1B Military Training Route North and South America for current routes.



Published at Washington, D.C.

U.S. Department of Commerce

National Oceanic and Atmospheric Administration

National Ocean Service

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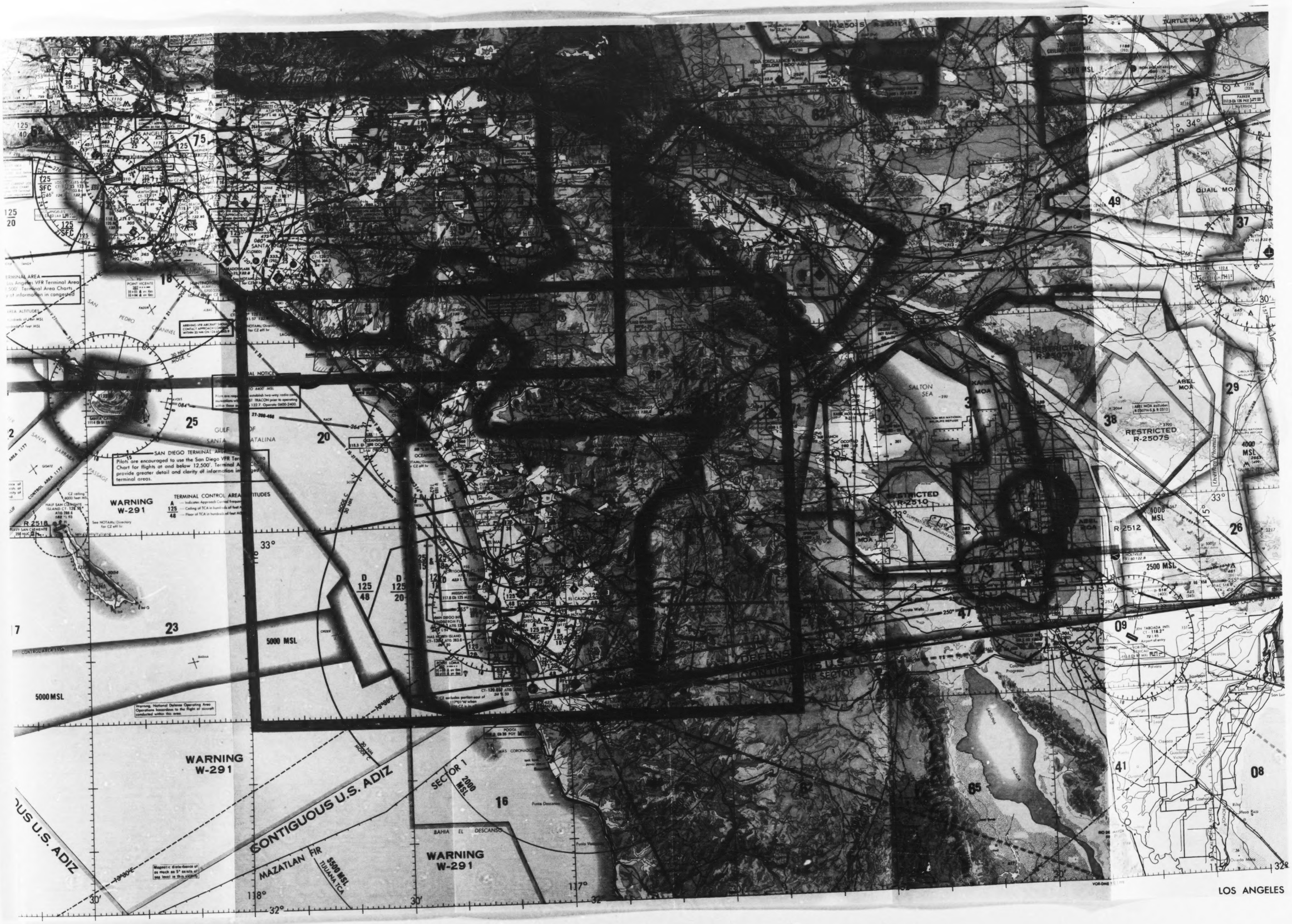
SAN DIEGO TERMINAL AREA
Pilots are encouraged to use the San Diego VFR Terminal Area Chart for flights at and below 12,500'. Terminal Area Charts provide greater detail and clarity of information in terminal areas.
WARNING W-291
TERMINAL CONTROL AREA ALTITUDES
A 125/48 — Indicates Approach Control frequency — Ceiling of TCA in hundreds of feet MSL — Floor of TCA in hundreds of feet MSL
See NOTAMs Directory for CZ eff hr
5000 MSL
Warning, National Defense Operating Area. Operations hazardous to the flight of aircraft conducted within this area.
WARNING W-291
CONTIGUOUS U.S. ADIZ
MAZATLAN FIR
5500 MSL
TIJUANA TCA
SECTOR 1
2000 MSL
WARNING W-291
BAHIA EL DESCANSO
Magnetic deviation of as much as 5° exists at sea level in this vicinity.
SALTON SEA
RESTRICTED R-2510
RESTRICTED R-2507
RESTRICTED R-2512
ABEL MOA
QUAIL MOA
TURTLE MOA
4000 MSL
2500 MSL
LOS ANGELES

WARNING W-537

WARNING W-537

WARNING W-289

WARNING W-412

WARNING W-289

WARNING W-290

WARNING W-291

WARNING W-60

NORTH PACIFIC OCEAN

CONTIGUOUS U.S. ADIZ

LOS ANGELES BASIN

5000 MSL

2000 MSL

MAZATLAN FIR

TIJUANA TCA

Chatsworth
VAN NUYS
LOS ANGELES
POMONA
RIVERSIDE
MARCH AFB/ARSA
Banning
SANTA ANA
HAWTHORNE
LONG BEACH
LAHAB
FULLERTON
ORANGE
SEAL BEACH
NORTAC
HUNTINGTON
LOS ALAMITOS
LONG BEACH CZ
LAGUNA
BARRET
COWN
ALBAS
PADDR
POINT VICENTE
SAN PEDRO CHANNEL
ARRIVING VFR AIRCRAFT SHOULD CONTACT APPROACH CONTROL WITHIN 20 NM ON 124.6
30 NM MODE C
SANTA CATALINA ISLAND
GULF OF SANTA CATALINA
SAN DIEGO TERMINAL AREA
Pilots are encouraged to use the San Diego VFR Terminal Area Chart for flights at and below 12,500'. Terminal Area Charts provide greater detail and clarity of information in congested terminal areas.
TERMINAL CONTROL AREA ALTITUDES
A — Indicates Approach Control frequency
125 — Ceiling of TCA in hundreds of feet MSL
48 — Floor of TCA in hundreds of feet MSL
See NOTAMs/Directory for CZ eff hr
WARNING W-291
CZ ceiling 6000 feet MSL
NALF SAN CLEMENTE ISLAND CT- 126.35 ATIS 268.6
R-2518
SAN CLEMENTE
SANTA BARBARA PASSAGE
SANTA BARBARA AREA 1177
CONTROL AREA 1177
CONTROL AREA 1156
GOATZ
BARMA
ORDER
OCEANSIDE
SAN DIEGO
CAUTION
EL CAJON
MISSION BAY
SAN DIEGO INTL LINDBERGH FLD
NAS NORTH ISLAND
POINT LOMA
CZ excludes portion east of 117°01'W when
POGGI
PGY
NAS CORONADO
Punta Descanso
BAHIA EL DESCANSO
Punta Ventana
Warning, National Defense Operating Area. Operations hazardous to the flight of aircraft conducted within this area.
Magnetic disturbance of as much as 5° exists at sea level in this vicinity
5000 MSL
WARNING W-291
CONTIGUOUS U.S. ADIZ
MAZATLAN FIR
5500 MSL
TIJUANA TCA
SECTOR 1
2000 MSL
16
23
25
20
18
7
33°
32°
30'
118°
117°

IR 2501S
TURTLE MOA
MOA EXCLUDES AIRSPACE BELOW 8000' AGL
55
52
47
49
37
34°
QUAIL MOA
PARKER
RIVERSIDE
SALTON SEA
RESTRICTED R-2507S
RESTRICTED R-2510
ABEL MOA
R-2512
4000 MSL
2500 MSL
33°
26
29
30'
38
33
47
09
08
41
65
62
57
91
Overhead Phoenix
Coyote Wells
250°
115°
328
LOS ANGELES

WARNING
W-291
SAN DIEGO TERMINAL AREA
Pilots are encouraged to use the San Diego VFR Terminal Area Chart for flights at and below 12,500'. Terminal Area Charts provide greater detail and clarity of information in terminal areas.
TERMINAL CONTROL AREA ALTITUDES
5000 MSL
CONTIGUOUS U.S. ADIZ
MAZATLAN FIR
5500 MSL
TIJUANA TCA
SECTOR 1
2000 MSL
WARNING
W-291
WARNING
W-291
R-2518
R-2519
R-2512
RESTRICTED
R-2507S
2500 MSL
POINT VICENTE
SAN PEDRO CHANNEL
SANTA BARBARA PASSAGE
GULF OF SANTA CATALINA
BAHIA EL DESCANSO
Warning, National Defense Operating Area. Operations hazardous to the flight of aircraft conducted within this area.
Magnetic disturbance as much as 5° easterly may exist in this vicinity.
LOS ANGELES